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09/673,440	11/20/2000	Masato Shimakawa	450101-02342	5342

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EXAMINER	
PIERRE, MYRIAM	

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/673,440	SHIMAKAWA ET AL.	
	Examiner	Art Unit	
	Myriam Pierre	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *15 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *35-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *35-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's Amendment filed 03/15/2005, responding to the OA of 12/14/2004. Applicant amended specification via a change in title, and the disclosure which is on page 4 line 11 though page 6 line 7 and page 6 line 10 through page 7 line 19; canceled claims 1-34 and newly added claims 35-66. Examiner accepts changes to title and specification. The 112 correction is approved.

Response to Argument

2. The applicant's arguments have been fully considered and the applicant's arguments are not persuasive for the following reasons:

35 U.S.C. 102 Rejection

a. Applicant's arguments with respect to claim 35, in regards to Franz et al. (6,393,388), have been considered but are moot in view of the new ground(s) of rejection. See Claim Rejections below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 35 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al. (5,826,220).

As to claims 35 and 51, Tanaka et al. teach

A translation method for translating source language sentence data to target language data comprising:

accessing (translating) the source (original) language sentence (translating original sentences in a first language col. 3 lines 8-9);

accessing translation information (col. 3 lines 8-11);

wherein the translation information (translation dictionary) includes one descriptor (headword) describing the source (first) language sentence data, corresponding target (second) language sentence data (translation dictionary storing headwords in the first language and candidate translation word in the second language, col. 3 lines 10-14) , and related information (lexical rules) that limits the applicability of the target (second) language sentence data to the source language sentence data (candidate translation) (candidate translation word in the second language corresponds to each lexical rules, col. 3 lines 10-14; the lexical rules are what limits the possible candidate translation);

determining a relationship between the source language sentence data and the translation information (translation dictionary) (Fig. 12, elements e-d, "sentence structure"; the sentence structure for the original and translated sentences are compared, thus a determination of the relationship between the source and translation information is established by analyzing the syntactic structure of the potentially

matching translation, the corresponding translation is obtained through the translation dictionary);

generating one candidate as a function of the translation information (translation dictionary) and the relationship between the source language sentence data and the translation information (translation dictionary)(Fig. 27; the "Candidate Translation Word" is a function of the translation dictionary and the relationship between the source language sentence data (under "Headword") and the translation dictionary (under "Candidate Translation Word")); and

determining applicability of each translation candidate to the source language data (Fig. 28-29; under "examine " and "inspect", the applicability of each translation candidate to the source is checked).

As to claims 36 and 52 Takeda et al. teach

related information supports an interpretation of a meaning of said target language sentence data corresponding to said source language sentence data accessed (col. 3 lines 10-15; translation based on lexical rules in translation dictionary, which is inherent to interpretation of a meaning of target language sentence).

As to claims 37 and 53, Takeda et al. teach

related information contains a check source language sentence as a variation of said target language sentence data corresponding to said source language sentence data accessed (Fig. 25A-C and Fig. 27; lexical rules or related information contains

'check source language' which corresponds with the 'candidate translation word' or target language, translating words is inherent to the process of translating sentences)

As to claims 38 and 54, Takeda et al. teach

a description of said check source language sentence is omitted in said translation information when said source language sentence data matches the check source language sentence that is described in the translation information (Fig. 12; "Subject" "Object" and "Definitive" are omitted in element e, the Translated sentence Syntactic Structure" when there is a match, see a-c, J2 in element b was chosen and the object "transportation means" is omitted).

As to claim 39 and 55, Takeda et al. teach

wherein related information includes at least one of a status explaining sentence in said source language that explains the status where said check source language is used (Fig. 12 elements a-c; the "Object" "Transportation means" are status explaining in source language regarding were the check source language is used, such as in Fig. 25 A-C).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

> invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 40-46, 49-50 and 56-62, 65-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (5,826,220) as applied to claim 35 above, and further in view of Sukeda et al. (5,854,997).

As to claims 40 and 56, Takeda et al. teach related information but lacks prediction of next source language.

However, Sukeda et al. teach

predicted next source language sentence data based on the source language sentence that has been accessed (Fig. 4a element 411; the desired sentence on the screen is in the source language, the method of selection options in the source language necessarily predicts the next source sentence based on the previous one for each set of sentences matches a situation requiring likely set of sentences to be exchanged during the course of conversation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to predict next source language sentence based on the source language sentence for interpreting sentences, thus for even a persons who do not mutually understand the language, to communicate with each other because when a sentence is selected, a set of sentences correlated to the selected sentences can be called up, as taught by Sukeda et al., col. 8 lines 12-16.

As to claims 41 and 57, Takeda et al. do not teach field information for limiting predicted next source language sentence.

However, Sukeda et al. teach

field information (Fig. 4a element 409) that is used for limiting predicted next source language sentence data (Fig. 7, elements 706, 715 and 720; selected menu button necessarily limits the predict next source language because of the CARD KEYBOARD SELECTION process in elements 710-716, once a card is selected, the predicted next source sentence is accessed in 720, when a user selects 706, the card 715 is chosen and therefore limits the predicted next source language via 725, Fig. 7 shows the operation behind Fig. 4a-b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to limit field information based on predicted next source language sentence to find keywords used for retrieving sentences which are appropriate for the context of the conversation, as taught by Sukeda et al., col. 5 lines 16-19 and 26-29.

As to claims 42 and 58, Takeda et al. teach wherein said related information includes source language sentence (Fig. 25A-C and Fig. 27) but do not teach response sentence prediction.

However, Sukeda et al. teach

at least one of a response sentence that necessarily predicts a response to said source language sentence data (Fig. 4a element 411; response sentences such as "Good Morning" and "How are you?" are predicted responses from element 706).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to predict next source language sentence based on the source

language sentence for interpreting sentences, thus for even a persons who do not mutually understand the language, to communicate with each other because when a sentence is selected, a set of sentences correlated to the selected sentences can be called up, as taught by Sukeda et al., col. 8 lines 12-16.

As to claims 43 and 59,

Takeda et al. teach the translation method as claimed in claim 35,

further comprising the steps of:

determining whether a translation result of said source language sentence data is a corresponding target language sentence data in accordance with said related information (Fig. 20B; the flow chart is an example of verification process that the translation result matches the source in accordance with related information or lexical rules (lexical rules are part of candidate translation process in element 719); and

reporting that said source language sentence data cannot be translated when no target language sentence data corresponds to said source language sentence data based on said related information (when there is no appropriate translation word in the display list at step 717, the user presses a registration key, the system is switched to a translation word input mode, col. 11 lines 39-44; the method of switching from the list to the registration key is necessarily reporting that there isn't a translation, thus the need to update the system by registering the new word).

As to claims 44 and 60,

Takeda et al. teach wherein target language sentence data is accessed and translated into the source language sentence data (Fig. 12).

As to claims 45 and 61,

Takeda et al. teach wherein said related information

But lacks predicting the next target language sentence data.

However, Sukeda et al. teach includes predicted next target language sentence data based on the target language sentence that has been accessed (Fig. 4b, elements 710 and 715; options of the translated or target language sentence based on the target language already accessed element 710, thus the prediction process is necessarily part of the display option).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to predict next source language sentence based on the source language sentence for interpreting sentences, thus for even a persons who do not mutually understand the language, to communicate with each other because when a sentence is selected, a set of sentences correlated to the selected sentences can be called up, as taught by Sukeda et al., col. 8 lines 12-16.

As to claims 46 and 62,

Takeda et al. teach related information but do not teach limiting prediction of next target language sentence based on the accessed source language sentence.

However, Sukeda et al. teach

wherein said related information includes field information that is used for limiting predicted next target language sentence data based on the source language sentence data that has been accessed (Fig. 7, elements 706, 715 and 720; selected menu button necessarily limits the predict next source language because of the CARD KEYBOARD SELECTION process in elements 710-716, once a card is selected, the predicted next source sentence is accessed in 720, when a user selects 706, the card 715 is chosen and therefore limits the predicted next source language via 725, Fig. 7 shows the operation behind Fig. 4a-b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to limit field information based on predicted next source language sentence to find keywords used for retrieving sentences which are appropriate for the context of the conversation, as taught by Sukeda et al., col. 5 lines 16-19 and 26-29.

As to claims 49 and 65, Takeda et al. do not teach response prediction. However, Sukeda et al. teach

wherein response prediction information is generated in response to said source language sentence data accessed, and the response prediction information that is generated is presented (Fig. 4a element 411; response sentences such as "Good Morning" and "How are you?" are predicted responses from element 706).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to predict next source language sentence based on the source language sentence for interpreting sentences, thus for even a persons who do not

mutually understand the language, to communicate with each other because when a sentence is selected, a set of sentences correlated to the selected sentences can be called up, as taught by Sukeda et al., col. 8 lines 12-16.

As to claims 50 and 66, Takeda et al. do not teach response prediction.

However, Sukeda et al. teach

wherein said response prediction information includes at least one of a response described as said related information in the translation information corresponding to said source language data (Fig. 4b, elements 710 and 715; options of the translated or target language sentence based on the target language already accessed element 710, thus the prediction process is necessarily part of the display option); and

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to predict next source language sentence based on the source language sentence for interpreting sentences, thus for even a persons who do not mutually understand the language, to communicate with each other because when a sentence is selected, a set of sentences correlated to the selected sentences can be called up, as taught by Sukeda et al., col. 8 lines 12-16.

7. Claims 47 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (5,826;220), as applied to claim 35 above, in view of Kleinschmidt et al. (6,085,112).

As to claims 47 and 63,

Takeda et al. teach source and target language but do not teach voice input or voice output.

However, Kleinschmidt et al. teach

wherein said source language sentence data is accessed and recognized as voice data and said target language data is generated and output as voice data (speech input and output means, foreign translation within scope of communication device, col. 3 lines 35-37 and col. 4 lines 64-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to process source and translated language as input and output respectively, in order permit commands to be issued to the device without using hands and/or permits message from the device to be perceived without the eyes, as taught by Kleinschmidt et al, col. 3 lines 35-40.

8. Claims 48 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (5,826,220), in view of Kleinschmidt et al. (6,085,112), as applied to claims 47 and 63 above, in further view of in view of Sukeda et al. (5,854,997).

As to claims 48 and 64,

Takeda et al. teach wherein said related information but lacks including predicting the next source language sentence or voice recognition.

However, Kleinschmidt et al. teach

voice recognition (speech recognition, col. 8 line 56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to limit field information via voice recognition in order permit commands to be issued to the device without using hands and/or permits message from the device to be perceived without the eyes, as taught by Kleinschmidt et al, col. 3 lines 35-40.

Neither Takeda et al. nor Kleinschmidt et al. teach predicting the next source sentence.

However, Sukeda et al. teach

predicted next source language sentence data based on the source language sentence data that has been accessed (Fig. 4b, elements 710 and 715; options of the translated or target language sentence based on the target language already accessed element 710, thus the prediction process is necessarily part of the display option); and

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to predict next source language sentence based on the source language sentence for interpreting sentences, thus for even a persons who do not mutually understand the language, to communicate with each other because when a

sentence is selected, a set of sentences correlated to the selected sentences can be called up, as taught by Sukeda et al., col. 8 lines 12-16.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myriam Pierre whose telephone number is 703-605-1196. The examiner can normally be reached on Monday – Friday from 5:30 a.m. - 2:00p.m.

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER